What is a cross connection and why are they dangerous?

A cross connection is a physical connection between potentially contaminated water and the town's drinking water. A drop in water pressure can cause boiler water, sprinkler water etc to carry contaminated water into the drinking water system if the proper protection devices are not in place. Greenfield has an extensive cross connection prevention program whereby all industrial and commercial buildings are surveyed and required to install proper devices. These devices are then tested 2x/yr by one of our certified water system operators.

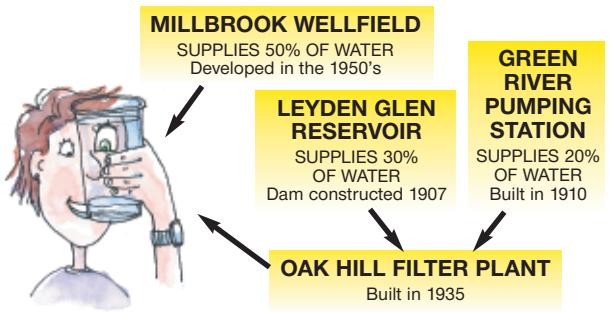
What about cross connections in my home?

To prevent a cross connection never submerge hoses in buckets, pools, tubs or sinks and do not use spray attachments on hoses without a backflow prevention device on the faucet. Outside faucets in newer homes (20 yrs and newer) will have the proper devices already built into the faucet. Devices can easily be attached to older faucets. These are inexpensive and available in any hardware store... just ask for a "hose bib vacuum breaker." One should be installed on all threaded faucets inside and outside of our home. If confused about what you need call 772-1539 and a certified operator will be glad to come to your home and advise you.

What's New in My Water System?

In July the Water Division replaced 550 ft of 6" asbestos cement water pipe on Carol Lane with 8" ductile iron pipe. While asbestos pipe does not pose health risks like friable asbestos, it is not as durable as other kinds of pipe and therefore is being replaced.

GREENFIELD WATER SUPPLY SYSTEM



IMPORTANT INFORMATION ABOUT OUR DRINKING WATER

We are required to monitor our drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Due to a scheduling error, the Town violated the regulations by failing to monitor our drinking water for perchlorate in Sept 2007. The sampling was done October 2007 and perchlorate was not detected in any of the samples.

Thank you for  *conserving our water.*

PLEASE CONTACT US!!

The Dept of Public Works encourages comments and questions from our consumers regarding this report and Greenfield's drinking water in general. We encourage your input as to what questions you would like answered in future reports and suggestions for improvements within the system. Please call the numbers below or stop by our main office - Town Hall, 2nd floor, 14 Court Sq.

QUESTIONS REGARDING WATER QUALITY

Sandra Shields, DPW Director
772-1528 ext. 107 SandyS@townofgreenfield.org

Leaks, low pressure, meter problems, billing information: 772-1528 ext 100 or 106

EPA's Safe Drinking Water Hotline: 1-800-426-4791

Recycling/trash disposal questions: 772-1528 ext 106 or JanineG@townofgreenfield.org

Hazardous waste disposal questions: 772-1539 or SandyS@townofgreenfield.org

Department of Public Works Office Hours: Mon. – Thurs.: 7:00 am to 5:00 pm, Fri.: 7:00 am to 12:30 pm

Transfer Station Hours: Tuesday through Friday: 12:30 pm to 2:30 pm, Saturday: 8:30 am to 4:00 pm

WATER ... WE CAN'T LIVE WITHOUT IT.

It makes up about 60% of our bodies and 70% of our brains. To survive, each of us must replace more than two quarts of it each day through the foods we eat and liquids we drink.

WATER QUALITY REPORT 2007

GREENFIELD, MASSACHUSETTS
Mayor Christine Forgey

VOLUME X • REPORTING YEAR 2007
PUBLIC WATER SUPPLY # 1114000

COMMONLY ASKED QUESTIONS

Is Greenfield's water hard?

No! There is a common misconception that all New England water is hard. This is not true. Greenfield's water is categorized "soft" meaning that it contains less than 75 ppm (less than 4 grains) of hardness.

Is Greenfield's water fluoridated?

No! Greenfield's drinking water is not, nor ever has been fluoridated. Parents should discuss their children's fluoride needs with their dentist and pediatrician.

When I'm working in the yard, I am tempted to drink from the garden hose. Is this safe?

No. A typical vinyl garden hose has substances in it to keep it flexible; these chemicals get into the water as it passes through the hose and they are not good for you. There is a type of hose on the market that is made of food grade plastic and this is the type of hose that should be used in campers etc.

Our pediatrician just informed us our child has an elevated lead level in his blood. Can we have our water tested to determine if it is the source of the problem?

Yes. Harmful levels of lead in drinking water are almost never found in the water source. However, in between the source of your water and your faucet is a series of pipes and connections, including the plumbing in your own home that can contribute to the problem. Previous testing has revealed few cases where there was an elevated lead level in our customer's tap water, but if you would like the water in your home tested, please call 772-1539 for further details. There is no charge for this service.

SUBSTANCES DETECTED

Below are substances that were detected in the Town's drinking water during the years listed next to the parameter. None of these substances were detected above the allowable limit.

CHEMICAL PARAMETERS

SUBSTANCE / YEAR	UNITS	HIGHEST LEVEL ALLOWED (EPA's MCL)*	HIGHEST LEVEL DETECTED	RANGE OF DETECTED LEVELS	IDEAL GOALS (EPA's MCLG)*	MAJOR SOURCES IN DRINKING WATER
Barium '04	ppm	2.0	0.008	0.008	2.0	Erosion of natural deposits
Nitrate '07	ppm	10.0	0.54	0.24 - 0.54	10.0	Runoff from fertilizer use; Erosion of natural deposits.
Nitrite '07	ppm	1.0	0.03	0.03	1.0	Runoff from fertilizer use; Erosion of natural deposits.
Chlorine '07	ppm	MRDL= 4	1.51	0.27 – 1.51	MRDLG = 4	Water treatment chemical used to control microbes
Total Trihalomethanes '07	ppb	100	12.8 Annual average	5.0 – 22.9	0	Disinfection by-products
Haloacetic Acids '07	ppb	60	5.0 Annual average	2.4 – 7.4	n/a	Disinfection by-products
Radium 226 & 228 '03	pCi/l	5	0.8	0.2 – 1.0	0	Erosion of natural deposits
Turbidity* '07	NTU	Treat tech* = 1	0.85	.01 - 0.85	none	Soil runoff
Lead '05	ppb	Action level* = 15	3 90th percentile	0 – 48.0 4 sites > 15	0	Household plumbing and service connections
Copper '05	ppm	Action level* = 1.3	1.3 90th percentile	0.10 - 2.47 4 sites > 1.3	1.3	Household plumbing and service connections
Sodium '07	ppm	N/A	15.8	3.11 – 15.8	N/A	Runoff from stormwater
Sulfate '04	ppm	N/A	6.4	6.4	N/A	Natural sources

DEFINITIONS:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there are no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

ppm: One part per million (this would be one penny in $10,000)

ppb: One part per billion (one penny in $10,000,000)

***Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.

***Action Level:** The concentration of a contaminant that triggers treatment or other requirement that a water system must follow. Action levels are reported at the 90th percentile for homes at greatest risk.

***Turbidity:** Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

Are there any precautions some of our customers should consider?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Crytosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The Town is mandated by EPA to include the following generic language about the health effects of certain contaminants and drinking water sources:

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of certain substances, which EPA calls "contaminants" even if the source of the contaminant is from naturally occurring phenomena such as rock formations. The presence of contaminants does not necessarily indicate that water poses a health risk. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include microbial, inorganic, organic and radioactive contaminants.

In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.